Showing Their True Colours

IBDoc® Calprotectin Patient Self Test Results Correlate Well with Clinical Data
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The TrueColours IBD project at the John Radcliffe Hospital, Oxford, uses the BÜHLMANN IBDoc® patient self-test to show how faecal calprotectin concentrations correlate well with endoscopic and histopathologic findings.

The TrueColours project is looking at a comprehensive overview of the symptoms and quality of life of patients with ulcerative colitis. On a daily basis, patients enter information on their symptoms into an online system (Simple Clinical Colitis Activity Index SCCAI).

This is then combined with blood, calprotectin, sigmoidoscopy (Ulcerative Colitis Endoscopic Index of Severity (UCEIS) and histology (Nancy) results. Dr. Alissa Walsh and her team will then use this data to enable individualised treatment based on the severity of the current condition.

During the 6 month study, sixty six patients collected real time information regarding symptoms and quality of life. Forty eight of these also performed at least one calprotectin assay using the IBDoc, although the mean number was four. Ten of the patients had an invalid result due to incorrect processing, but nine went on to have valid results on subsequent tests.

Analysis of the data shows the calprotectin result had a low correlation with the SCCAI score and a high correlation with both the UCEIS (Figure 1) and Nancy index (Figure 2).

This data supports previous findings that calprotectin concentration correlates poorly to patient symptoms but well to endoscopic and histopathologic findings.

The distribution of the calprotectin results for UCEIS and Nancy criteria were reviewed and it is proposed that a calprotectin level of <180µg/g could be indicative that a patient is likely to be in both endoscopic and histologic remission which may avoid the need for endoscopic procedures in these patients.

Figure 1. Distribution of FCal by UCEIS groups
FCal= IBDoc® faecal calprotectin measured in µg/g of faeces
UCEIS= Ulcerative Colitis Endoscopic Index of Severity: scores range from 0 (best) to 8 (worst)
UCEIS scores were divided into three groups (UCEIS 0-1, 2-3 and 4-8)

Figure 2. Distribution of FCal by Nancy groups
Nancy= Nancy histopathological index: scores range from 0 (best) to 4 (worst)
Nancy scores were divided into two groups (Nancy 0-1, 2-3 and 2-4).